

Notice of Allowability

Application No.

10/767,012

Examiner

Jeff Wollschlager

Applicant(s)

MORRISON ET AL.

Art Unit

1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the appeal brief filed August 6, 2007.
2. ☒ The allowed claim(s) is/are 8-13 and 15-18.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview (via voicemail) with Mr. David Maire on October 12, 2007.

The application has been amended as follows:

Claims 1-3, 5-7 and 14 have been canceled.

Claim 12, line 2, after "the" inserted - - first - -.

Claim 12, line 3, after "removing the" inserted - - first - -.

Claim 13, line 2, after "the" inserted - - first - -.

Claim 16, line 3, after "the" inserted - - first - -.

Claim 17, line 1, after "the" inserted - - first - -.

Claim 18, line 4, after "the" inserted - - second - -.

Claim 11 (amended): A method of manufacturing a gas turbine component comprising a ceramic matrix composite material member defining a passageway and a layer of ceramic insulating material protecting the ceramic matrix composite member from high temperature gas passing through the passageway, the method comprising:

defining an annular cavity having a first thickness dimension between an inner mold and an outer mold;

casting ceramic insulating material within the cavity to have a first thickness dimension;

removing the outer mold;

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removing a portion of the ceramic insulating material to reduce the ceramic insulating material to a second thickness dimension smaller than the first thickness dimension while the inner mold remains in place mechanically supporting the ceramic insulating material;

forming a layer of ceramic matrix composite material on an outer surface of the ceramic insulating material; and

removing the inner mold[.]; further comprising:

performing the step of defining an annular cavity using a first inner mold;

removing the first inner mold after the step of casting;

at least partially curing the ceramic insulating material after the step of removing the first inner mold; and

installing a second inner mold for supporting the ceramic insulating material prior to the step of removing a portion of the ceramic insulating material.

Claim 15 (amended): The method of claim [14] 11, further comprising forming the second inner mold of a material different than a material of the first inner mold.

Claims 8-13 and 15-18 are allowed. The following is an examiner's statement of reasons for allowance:

Regarding claim 8, the prior art of record does not teach or suggest a method of performing a mechanical process on a layer of insulating material while a fugitive inner mold remains in place, followed by removing the fugitive inner mold and installing a second inner mold comprising a fugitive material in combination with the other features instantly claimed.

Regarding claim 11, the prior art of record does not teach or suggest a method of manufacturing a gas turbine component comprising casting ceramic insulating material within an

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annular cavity defined between a first inner mold and an outer mold, removing the first inner mold after the step of casting and installing a second inner mold prior to the step of removing a portion of the ceramic insulating material in combination with the other features instantly claimed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Wollschlager whose telephone number is 571-272-8937. The examiner can normally be reached on Monday - Thursday 7:00 - 4:45, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on 571-272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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JW

Jeff Wollschlager
Examiner
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October 29, 2007

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SUPERVISORY PATENT EXAMINER